



ELC-490-34

LED Chip blue-green (Cyan)

Radiation	Type	Electrodes
blue-green (cyan)	InGaN / sapphire	P + N up

	Description <ul style="list-style-type: none"> - Substrate: Sapphire, epitaxial layer: GaN based material - N and P bonding pad electrodes: Au alloy - Chip size: $280 \pm 20 \mu\text{m} \times 310 \pm 20 \mu\text{m}$ (12 x 13 mil)
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All dimensions in microns.

Packing

Chips on adhesive film with wire-bond side top



Maximum Ratings

 $T_{\text{amb}} = 25^\circ\text{C}$, unless otherwise specified

Parameter	Test cond.	Symbol	Min	Typ	Max	Unit
Forward current (DC)		I_F			20	mA
Peak forward current	$t_p \leq 50 \mu\text{s}$, $t_p/T = 1/2$	I_{FM}			50	mA
Reverse voltage		V_R			5	V
Junction temperature		T_J			+100	$^\circ\text{C}$
Operating temp.		T_{ST}	-40		+100	$^\circ\text{C}$
Storage temperature		T_{ST}	-40		+85	$^\circ\text{C}$

Optical and Electrical Characteristics

 $T_{\text{amb}} = 25^\circ\text{C}$, unless otherwise specified

Parameter	Test cond.	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 20 \text{ mA}$	V_F		3.2	3.5	V
Reverse current	$V_R = 5 \text{ V}$	I_R			1	μA
Peak wavelength	$I_F = 20 \text{ mA}$	λ_P		497		nm
Dominant wavelength	$I_F = 20 \text{ mA}$	λ_D	495		497.5	nm
Full width at half maximum	$I_F = 20 \text{ mA}$	$\Delta\lambda_{0.5}$			30	nm
Luminous intensity	$I_F = 20 \text{ mA}$	I_v	260	300	340	mcd
Luminous flux	$I_F = 20 \text{ mA}$	Φ_v		1200		mlm
Radiant intensity	$I_F = 20 \text{ mA}$	I_e		0.95		mW/sr
Radiant flux	$I_F = 20 \text{ mA}$	Φ_e		5.6		mW